



Product Overview

The SunSpec System Validation Platform (SVP) Dashboard is a Microsoft Windows application that enables visibility and control of SunSpec Modbus-enabled devices. The web browser-based interface leverages standardized SunSpec device information models and a web-service application program interface (API) for test harness integration, certification, and support activities.

(+) Plus Packs containing additional features are available to members of the SunSpec Alliance for purchase as upgrades to the standard SunSpec SVP Dashboard license.

Key Features

- Read and write SunSpec Modbus registers for all SunSpec device models and vendor-defined extensions.
- View the model definitions and device information models implemented in a device.
- Generate the Protocol Implementation Conformance Statements (PICS) required for device certification.
- Create and manage model directories to extend model definitions.
- Interact with SunSpec Modbus Distributed Energy Resource (DER) interface defined by IEEE 1547-2018.
- Capture Modbus protocol traffic using the embedded Modbus protocol traffic analyzer.
- Automate device testing and certification for SunSpec Modbus-enabled devices. (+)

Benefits for Product Developers

- Reduce software development time needed to implement SunSpec Modbus interfaces for inverters, Energy Management Systems (EMS), and other energy devices.
- Verify that your device conforms to SunSpec specifications prior to starting third-party safety- and protocol compliance testing.
- Accelerate development of SunSpec Modbus gateways by leveraging the SunSpec Modbus DER simulator.

Benefits for Software Testers

- Prepare SunSpec Modbus-enabled devices for SunSpec Certification using automated conformance test suites. (+)
- Troubleshoot SunSpec Modbus-compliant devices and Modbus networks using diagnostic features.
- Integrate SunSpec Dashboard functionality with your in-house testing framework using an OpenAPI-based Web-service interface.

Plus Pack Upgrades

SunSpec Modbus for IEEE 1547 Test Suite: Predefined test suite to automate DER device testing using the SunSpec Modbus interface and the IEEE 1547.1 communication profile. (+)

EMS Test Suite: Pre-defined test suite to automate for SunSpec Modbus compatible DER- and energy storage devices used in energy management systems. Test procedure defined in conjunction with the MESA Alliance. (+)

Technical Specifications

Requirements	Operating System	64-bit Microsoft Windows operating system: Microsoft Windows 7, or later.
	Browser	Mozilla Firefox, Microsoft Edge, Google Chrome.
Licensing and Support	License Terms	12-month, enterprise or single machine.
	Support Service	Web-based trouble ticketing system and exclusive user forum, included with license.
	Software Updates	Included with license.
	Upgrades (+)	IEEE 1547 Plus Pack, EMS Plus Pack, more TBA.
Supported Protocols	Standard Modbus TCP	Interoperates with standard Modbus TCP tools, Ethernet and WiFi networks, and Transport Level Security (TLS) 1.2.
	Standard Modbus RTU	Interoperates with standard Modbus RTU (RS-485) serial networks.
Supported SunSpec Models	Supports all SunSpec Models	Compatible with IEEE 1547-2018 DER interface (700 series) plus SunSpec Common Model (1), Network Models (010-019), Inverter (100), Meter (200), Environmental (300), String Combiner (400), PV Module (500), Tracker (600), Energy Storage (800), and 64000 series vendor extensions.
Tests	SunSpec Modbus for 1547 Test Suite (+)	Profile, test procedure, and test script for SunSpec Modbus 1547 Certification.
	EMS Test Suite (+)	Conformance test profile for EMS.
Other	API Access	Integrate with in-house test system.

Access SunSpec SVP Dashboard

SunSpec SVP Dashboard is available to members of the SunSpec Alliance at no cost. Users may purchase “Plus Packs” to access additional features. To become a member of the SunSpec Alliance or to learn more, email membership@sunspec.org.